

Absolute maximum ratings

(Ta=25°C)

Symbol	Ratings	Unit
V _{CB0}	120	V
V _{CEO}	100	V
V _{EB0}	6	V
I _C	2	A
I _{CP}	4 (PW≤1ms, Du≤50%)	A
I _B	0.2	A
I _F	2 (PW≤0.5ms, Du≤25%)	A
I _{FSM}	4 (PW≤10ms, Single pulse)	A
V _R	120	V
P _T	4 (Ta=25°C) 20 (Tc=25°C)	W
T _j	150	°C
T _{stg}	-40 to +150	°C

Electrical characteristics

(Ta=25°C)

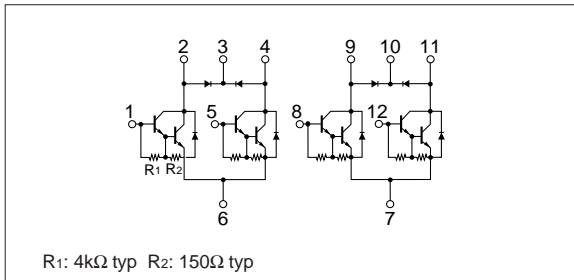
Symbol	Specification			Unit	Conditions
	min	typ	max		
I _{CB0}			10	μA	V _{CB} =120V
I _{EBO}			10	mA	V _{EB} =6V
V _{CEO}	100			V	I _C =25mA
h _{FE}	2000	6000	15000		V _{CE} =4V, I _C =1A
V _{CE(sat)}		1.1	1.5	V	I _C =1A, I _B =2mA
V _{BE(sat)}		1.7	2.0	V	

●Diode for flyback voltage absorption

(Ta=25°C)

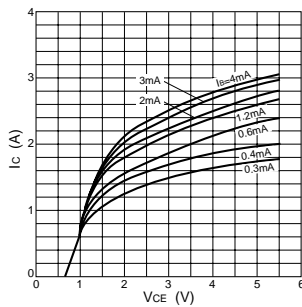
Symbol	Specification			Unit	Conditions
	min	typ	max		
V _R	120			V	I _R =10μA
V _F			1.8	V	I _F =1A
I _R			10	μA	V _R =120V
t _{rr}		100		ns	I _F =±100mA

■Equivalent circuit diagram

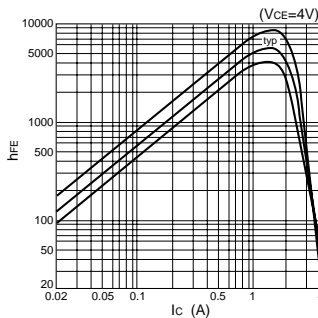


Characteristic curves

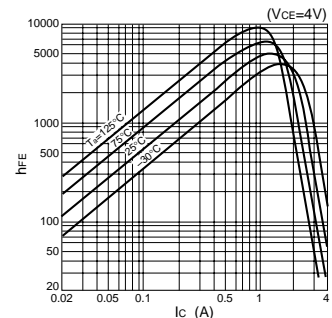
I_C-V_{CE} Characteristics (Typical)



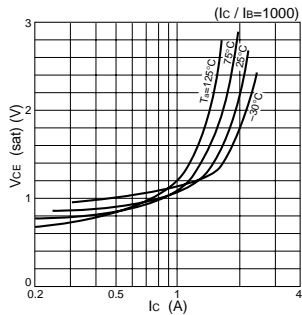
h_{FE}-I_C Characteristics (Typical)



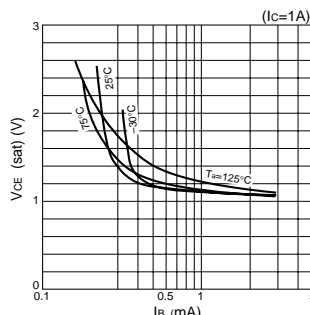
h_{FE}-I_C Temperature Characteristics (Typical)



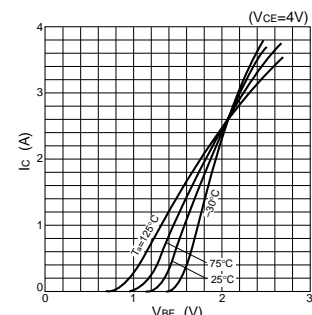
V_{CE(sat)}-I_C Temperature Characteristics (Typical)



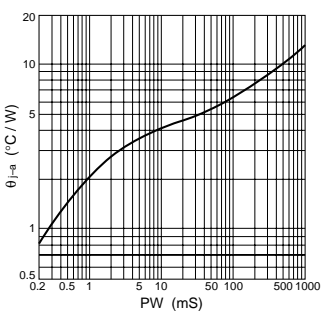
V_{CE(sat)}-I_B Characteristics (Typical)



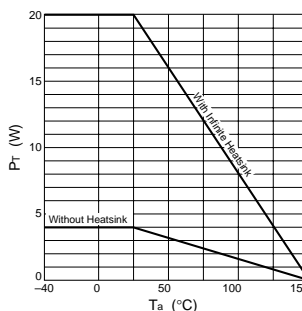
I_C-V_{BE} Temperature Characteristics (Typical)



θ_{J-a}-PW Characteristics



P_T-T_a Characteristics



Safe Operating Area (SOA)

